

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-39. (Canceled)

40.-52 (Canceled)

53. **(Currently Amended)** A method for regulating apoptosis of a cell comprising contacting the cell with an agent that directly ~~regulates~~ modulates the activity of an MEKK 1 ~~protein~~ polypeptide set forth as SEQ ID NO:2 or 4, ~~in said cell~~ such that apoptosis of the cell is regulated.

54. **(Currently Amended)** The method of claim 53, wherein said ~~method comprises~~ ~~contacting said cell with a compound that~~ agent inhibits the ability of a regulatory domain of said MEKK protein to regulate the activity of a kinase domain of said MEKK protein.

55. **(Currently Amended)** The method of claim 53, wherein said ~~method comprises~~ ~~contacting said cell with~~ agent is a peptide that binds to the regulatory domain of said MEKK protein, wherein said peptide inhibits the ability of said regulatory domain to regulate the activity of a kinase domain of said MEKK protein.

56. **(Currently Amended)** The method of claim 53, wherein said ~~method comprises~~ ~~contacting said cell with~~ agent is a peptide that binds to the kinase catalytic domain of said MEKK protein, wherein said peptide inhibits the ability of said MEKK protein to be phosphorylated or to phosphorylate a substrate.

57. **(Previously Presented)** The method of claim 53, wherein said cell is selected from the group consisting of a T cell, a B cell, a neutrophil, a macrophage, a basophil, a neuronal cell, an epidermal cell, a mast cell, a dendritic cell, a pluripotent stem cell and a fibroblast.

58. **(Previously Presented)** The method of claim 53, wherein said cell comprises a cell involved in a disease, said disease being selected from the group consisting of cancer, autoimmune diseases, allergic responses, graft-host rejection, inflammatory responses and neurological disorders.

59. **(Currently Amended)** The method of claim 53, wherein said method comprises transforming or transfecting said cell with a nucleic acid molecule encoding ~~an~~ said MEKK protein.

60. **(Previously Presented)** The method of claim 59, wherein said nucleic acid molecule encodes an MEKK protein having kinase activity that is not regulated.

61. **(Currently Amended)** A method for regulating apoptosis of a cell comprising transforming or transfecting said cell with a nucleic acid molecule encoding a MEKK protein
~~The method of claim 59, wherein said nucleic acid molecule encodes an MEKK protein~~
comprising an amino acid sequence having at least 85% identity with a the MEKK catalytic kinase domain ~~of an MEKK protein selected from the group consisting of SEQ ID NO: 2 SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12 and SEQ ID NO: 14.~~

62. **(Currently Amended)** A method for regulating apoptosis of a cell comprising transforming or transfecting said cell with a nucleic acid molecule encoding a MEKK protein
~~The method of claim 59, wherein said nucleic acid molecule encodes an MEKK protein~~
comprising an amino acid sequence having at least 85% identity with a regulatory domain of an the MEKK protein selected from the group consisting of set forth as SEQ ID NO: 2; ~~SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12 and SEQ ID NO: 14.~~

63. **(Canceled)**

64. **(Canceled)**

65. **(New)** The method of claim 62, wherein said amino acid sequence has at least 95% identity with the MEKK protein set forth as SEQ ID NO:2.